

1 I claim:

2 1. A system intended to remove noxious odors resulting from disposal of human waste  
3 into the porcelain bowl of an ordinary flush toilet while seated upon its hinged seat spaced  
4 apart from and in contact with the top surface of said porcelain bowl and mounted to the rear  
5 of said top surface with a pair of mounting bolts; said system comprising:

6 at least one manifold, at least one hood, conduit, and at least one blower;

7 each said manifold possessing a manifold inlet, a manifold plenum, and a manifold  
8 extension with a manifold outlet;

9 said manifold inlet possessing dimensions sufficiently diminutive to fit the same in  
10 the space: between the hinged seat and the top surface of the porcelain bowl of an ordinary  
11 flush toilet and between the pair of mounting bolts mounting said hinged seat to the rear of  
12 the top surface of said porcelain bowl;

13 said manifold plenum possessing communication with said manifold inlet and said  
14 manifold extension facilitating air flow through said manifold inlet and then through said  
15 manifold plenum and thence through said manifold extension with a negative pressure  
16 differential with respect to ambient pressure supplied to said manifold extension;

17 said manifold extension being adapted for connection of said conduit to said manifold  
18 outlet;

19 each said blower being remotely located from said manifold and connected with said  
20 conduit such that operation of said blower effects the supply of a negative pressure  
21 differential upon said manifold inlet with said conduit connected to said manifold extension;

22 each said manifold further possessing two lateral wings each possessing one slot  
23 spaced apart from each other and possessing dimensions enabling the mounting bolts of an  
24 ordinary flush toilet to be passed therethrough in location of said manifold;

25 each said hood possessing a medial section and two lateral wings each possessing one

1 slot spaced apart from each other and possessing dimensions enabling the mounting bolts of  
2 an ordinary flush toilet to be passed therethrough in location of said hood;

3 said medial section of said hood possessing a curved fore edge and a straight rear edge  
4 spaced apart from each other a distance sufficient to locate said curved fore edge in an  
5 overhang of the rear of the cavity of the porcelain bowl of an ordinary flush toilet and said  
6 straight rear edge in contact with said manifold inlet when both said manifold inlet and said  
7 hood are disposed upon the rear of the top surface of the porcelain bowl with the mounting  
8 bolts for the hinged seat passing through said slots through said wings of said hood and said  
9 wings of said manifold;

10 whereby operation of at least one said blower with said conduit connected to at least  
11 one said manifold extension effects a negative pressure differential upon said manifold inlet  
12 and air borne odors associated with disposal of human waste into the porcelain bowl of a  
13 flush toilet are removed with the flow of air under said medial section of said hood into said  
14 manifold inlet, through said manifold plenum, manifold extension, and conduit.

15  
16 2. The system of claim 1 wherein said manifold inlet possesses at least one vertical vane  
17 facilitating laminar airflow therethrough.

18  
19 3. The system of claim 1 wherein said manifold plenum possesses a rounded top  
20 facilitating laminar airflow therethrough.

21  
22 4. The system of claim 1 wherein said slots through said wings of said manifold are  
23 open.

24  
25 5. The system of claim 1 wherein said slots through said wings of said hood are closed.

1     **6.**     The system of claim 1 wherein said manifold extension possesses a sensor port  
2     through which an airflow velocity probe may be inserted to determine the volume rate of air  
3     flow therethrough.

4  
5     **7.**     The system of claim 1 including an adapter for conduit of different sizes.  
6

7     **8.**     The system of claim 7 wherein said different sizes of conduit are comprised of  
8     schedule 40 PVC piping and three inch diameter metal ducting.  
9

10    **9.**     The system of claim 1 wherein said manifold extension possesses annular barbs  
11    facilitating the connection of flexible hose thereto.  
12

13    **10.**    The system of claim 1 possessing a hose connection permitting quick disconnection  
14    of the flexible hose to the manifold outlet.  
15

16    **11.**    The system of claim 10 wherein said hose connection and said manifold outlet each  
17    possess a pair of flanges facilitating fastening of said hose termination to said manifold  
18    outlet.  
19

20    **12.**    The system of claim 11 with a resilient gasket disposed between said hose termination  
21    and said manifold outlet to ensure an air tight seal.  
22

23    **13.**    The system of claim 1 wherein a vent in a room in which at least one said flush toilet  
24    is located is connected to said conduit.  
25

1     **14.**    The system of claim 1 wherein operation of said blower remote from said manifold  
2     is controlled by a light switch located in a room in which at least one said flush toilet is  
3     located.

4  
5     **15.**    The system of claim 14 wherein operation of said blower is controlled by said light  
6     switch using a relay connected by wiring to an electrical power supply.

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8     **16.**    The system of claim 15 wherein operation of said blower is controlled by said light  
9     switch using a relay connected by wiring to an electrical power supply and a printed circuit  
10    board facilitating control by a plurality of light switches.

11  
12    **17.**    The system of claim 1 wherein plastic piping possessing an outer diameter of no more  
13    than two inches is at least partly utilized for said conduit.

14  
15    **18.**    The system of claim 17 having said plastic piping possessing an outer diameter of no  
16    more than two inches run as conduit within the frame of a wall by hanging a length of said  
17    conduit from an aperture cut through a frame sill.

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19    **19.**    The system of claim 18 wherein said length of conduit is hung from a hanger  
20    possessing a shoulder larger than said aperture cut through a frame sill and at least one  
21    smaller end passable through said aperture.

22  
23    **20.**    The system of claim 19 wherein at least one said smaller end passable through said  
24    aperture of said hanger comprises a female connector end.

1     **21.**    The system of claim 1 having one said blower disposed within a blower housing  
2     possessing one exhaust port and at least one inlet port connectible to conduit.

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4     **22.**    The system of claim 21 wherein said blower housing is constructed of sheet metal.

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6     **23.**    The system of claim 21 wherein said blower housing has a regulator permitting  
7     variable closure of an orifice through a wall of said blower housing.

8  
9     **24.**    The system of claim 22 wherein said regulator comprises a door with a handle  
10    permitting manually variable closure of said orifice.

11  
12    **25.**    The system of claim 21 wherein said exhaust outlet of said blower housing is round.

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14    **26.**    The system of claim 25 wherein said rectangular exhaust outlet of said blower housing  
15    possesses an exterior sleeve facilitating attachment of conduit with said exhaust outlet.

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17    **27.**    The system of claim 21 wherein said exhaust outlet of said blower housing is  
18    rectangular.

19  
20    **28.**    The system of claim 27 wherein said rectangular exhaust outlet of said blower housing  
21    possesses an exterior sleeve facilitating attachment of conduit with said exhaust outlet.

22  
23    **29.**    The system of claim 21 wherein said blower housing possesses more than one said  
24    inlet port each connectible to conduit enabling the delivery of a negative pressure differential  
25    to a plurality of manifold inlets each located upon one of a plurality of ordinary flush toilets.

1     **30.**    The system of claim **29** wherein at least one said inlet port possesses an external  
2     sleeve facilitating connection of an end of round metal conduit thereto.

3  
4     **31.**    The system of claim **30** wherein said external sleeve possesses an annular flange with  
5     a fixed pattern of bolt holes.

6  
7     **32.**    The system of claim **31** including a reduction plate with a fixed pattern of bolt holes  
8     matching said fixed pattern of bolt holes in said annular flange of said external sleeve and  
9     a central aperture facilitating connection of the end of a length of plastic piping possessing  
10    a diameter of no more than two inches with the inlet port.

11  
12    **33.**    The system of claim **32** wherein said reduction plate possesses an external sleeve  
13    about said central aperture facilitating connection of the end of a length of plastic piping  
14    possessing a diameter of no more than two inches with the inlet port.